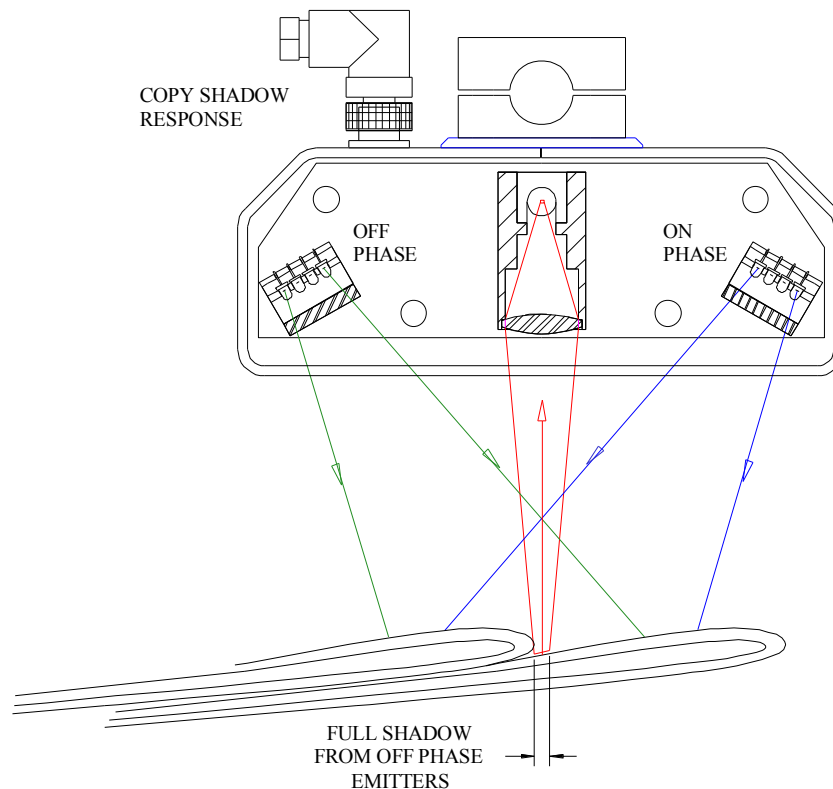


QTMS Copycounter 4 – How it works.

Steps:

1. Light from the ON phase emitter block (blue lines) is switched on and off and the receiver monitors the returning light level (red lines).
2. Light from the OFF phase emitter block (green lines) is switched on and off and the receiver monitors the returning light level (red lines).
3. The two light levels from steps 1 & 2 are compared.
4. If a leading edge has been detected an output signal is issued.



Decision making process:

The passage of leading edge of a product below the Copycounter causes a difference between, the amount of light at the receiver returned from the ON phase emitter, which creates no shadow, and the OFF phase emitter light which does cast a shadow.

Is it that simple?

The answer is no, not quite that simple, there are sensors using just that process but it was found be widely prone to also counting ripple on the surface of the product.

The CC4 has added a patented process that recognises the difference between the leading edge and ripple to make it one of the most versatile shingle delivery product counters on the market.
